

**SAFE AND EFFICIENT RESPONSE TO VIOLENT OR MASS CASUALTY  
INCIDENTS AT SCHOOLS**

**EXECUTIVE ANALYSIS OF FIRE SERVICE OPERATION IN EMERGENCY  
MANAGEMENT**

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An applied research project submitted to the National Fire Academy as part of the  
Executive Fire Officer Program

July 2005

## **ABSTRACT**

Responding to violence and/or mass casualty incidents (MCI) at schools is the issue addressed in this study. The problem is that the Memphis Fire Department (MFD) does not have guidelines for responding to violent and/or MCIs that occur in schools. The purpose of this research is to develop guidelines that address preplanning and responding to incidents at schools that will ensure the safety of the responder and provide timely medical assistance to the victims.

The action and descriptive research method was used to answer the following research questions pertaining to incidents involving violence and/or mass casualties at schools:

1. What common problems do emergency responders encounter?
2. What guidelines and/or recommendations are other emergency responders using or suggest using?
3. What are school systems doing to assist the emergency responders?
4. What components should the Memphis Fire Department include in their standard operational procedures (SOP)?

A literature review and interview were conducted and a questionnaire was distributed to gather data to support the research questions.

Problems responders face at school incidents include, but are not limited to the following: communications, resources, parents, and accountability. Guidelines and/or recommendations other emergency responders suggest using include using the incident command system (ICS), unified command, joint action plans, and preplanning. To assist the emergency responders, the school systems provide layouts of the schools, assist in the

command post, account for the students, and reunite students with parents. The MFD should include the following components in their SOP: preplanning, safety, unified command, medical branch, and resources.

Recommendations made to the MFD are to implement SOPs for responding to school incidents; to preplan and drill with schools and police; and to update SOPs as needed and develop a SOP for dispatchers.

## **CERTIFICATION STATEMENT**

I hereby certify that this paper constituted my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: \_\_\_\_\_

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## INTRODUCTION

The Memphis metropolitan area has two public school systems. The city school system has 191 schools K-12 with an enrollment of 118,039 students. The county school system has 45 schools K-12 with over 45,000 students enrolled. There are also three major universities and several colleges.

The problem is that the MFD does not have guidelines for responding to violent and/or MCIs that occur in schools. This has caused uncertainty and conflict for responders, school faculty, and parents. The purpose of this research is to develop guidelines that address pre-incident planning and response to incidents at schools that will ensure the safety of the responder and provide timely medical assistance to the victims.

The action and descriptive research method will be utilized by collecting data, conducting interviews with the safety officers of the two major school systems in Memphis, conducting interviews with personnel that have responded to incidents involving violence and/or mass casualties at schools, and distributing a questionnaire to other fire departments to answer the following research questions:

1. What common problems do emergency responders face at school incidents involving violence and/or mass casualties?
2. What guidelines and or recommendations are other emergency responders using or suggest using when dealing with violence and/or mass casualty incidents at schools?
3. What are school systems doing to assist the emergency responders that respond to school incidents involving violence and/or mass casualties?
4. What components should the Memphis Fire Department include in their SOPs for

responding to incidents involving violence and/or mass casualties at schools?

The author suggests that by determining what common problems emergency responders face when dealing with violence and/or MCIs at schools and determining what guidelines the fire department should follow as well as what roll the school staff will fill will better prepare them to deal with incidents of this nature. Fire departments and school systems that are prepared to deal with these types of incidents may alter the outcome and ultimately save the life of civilians and/or emergency personnel. Further more building the confidence level the parents and community have in the fire department and school system.

## **BACKGROUND AND SIGNIFICANCE**

When school was being dismissed for the day on November 18, 2002 at Chimney Rock Elementary school in Memphis, TN a car jumped the curb hitting nine children and one adult. One child was pinned under the car. Two children were airlifted from the school. There was confusion on the scene for the responders, school staff, students, and parents. The dispatch center was also overwhelmed with phone calls with conflicting reports and did not send a Battalion or a Division Chief on the call.

The following is a list of incidents at schools in Memphis, TN for school year 2004-2005 through April 15<sup>th</sup>: August 25<sup>th</sup> a 16 year old student was arrested after opening fire on a class mate; September 15<sup>th</sup> an eighth grade student dies after a gang related incident in the school bathroom; December 9<sup>th</sup> three 14 year-olds were involved in a fight resulting in two of them being stabbed; March 24<sup>th</sup> a 17 year old accidentally shot herself in the forearm with a gun she brought to school for protection.

On December 8<sup>th</sup>, 2004 “... fights between two rival gangs broke out before class, injuring one student and a sheriff’s deputy” (Edmondson, 2004, ¶ 4) at a Shelby County, TN school. The Metro Gang Unit had to be called to regain order. Eleven students were charged.

The Memphis City school system has had its fair share of incidents involving gang violence and guns. The following is a list of the number of guns confiscated at Memphis city schools,

**“1999-2000: 38**

**2000-2001: 40**

**2001-2002: 50**

**2002-2003: 34**

**2003-2004: 27”** (Kumar, 2005, p. B2).

The purpose of this research is to develop guidelines that address pre-incident planning and response to incidents at schools that will ensure the safety of the responder and provide timely medical assistance to the victims. The author suggest that determining what common problems responders face at school incidents and developing guidelines that address these problems, it may improve responder and schools actions at these incidents. Improving response actions on these incidents may save the life of civilians and/or emergency personnel and it will increase the confidence level that the parents and communities have in the emergency responders and school systems.

This research project relates to the course purpose of the National Fire Academy’s Executive Analysis of Fire Service Operations in Emergency Management course. “This course is designed to improve the Knowledge, Skills, and Attitudes (KSAs) required of



fire service leaders when applied to large-scale multi-agency emergency incidents in their communities” (NFA, 2003, p. SM 1-4). Learning what guidelines should be followed at MCIs and/or violent incidents at schools and practicing through drills with other agencies will improve the MFD’s ability to operate in the event of a real emergency.

This project also relates to two of the four United States Fire Administration’s operational objectives: “reduce the loss of life... in the age group 14 years old and below...and reduce the loss of life... of fire fighters” (U.S. Fire Administration National Fire Academy --Applied Research Guidelines 2002, p. II-2). Increasing one’s knowledge and skills in the emergency services will save both firefighter and civilians’ lives.

## **LITERATURE REVIEW**

A literature review was conducted to determine what data is available that supports the following research questions: What common problems do emergency responders face at school incidents involving violence and/or mass casualties? What guidelines and or recommendations are other emergency responders using or suggest using when dealing with violence and/or MCIs at schools? What are school systems doing to assist the emergency responders that respond to school incidents involving violence and/or mass casualties? Research was conducted at the Learning Resource Center at the National Fire Academy, the Memphis and Shelby County Public Library, Southwest Tennessee Community College library, the Internet, through interviews and questionnaires.

The bonfire collapse at Texas A&M University in College Station, Texas on November 18, 1999 created many problems for the emergency responders. “An event of this magnitude can quickly exceed the capabilities of not only the communications

system utilized by the emergency responders, but also the telecommunications system used by the community at large” (U.S. Fire Administration/Technical Report[USFA-TR]-133, 1999, p.5). Victim identification was a problem also because many of the students did not carry identification. (USFA-TR-133) noted that the severe trauma suffered by the deceased made immediate recognition impossible (1999, p.21). The large number of responders necessitated a massive rehab effort and rumor control was a problem because misinformation was being put out to the media. “The age of the deceased and the strong emotions and traditions surrounding the incident had a significant impact on the emergency responders” (USFA-TR-133, 1999, p.25).

The fire departments involved in the bonfire fire collapse used and practiced the incident management system (IMS), this incident reveals how crucial it is to have a strong IMS. The report gave several points that should be considered at an incident of this nature including “...the ability to switch from managing an incident to managing a disaster” (USFA-TR-133, 1999, p.38), that the highest ranking official may be better used in the Emergency Operation Center (EOC) or as a liaison instead of the Incident Commander (IC), and that unified command should be utilized and a representative from all agencies involved should remain at the Command Post (CP) for the duration of the incident. Suggestions for securing the scene include limiting access to the scene as well as identifying responders by their function. Record keeping should be maintained in the CP as well as in the EOC and Staging area. An ideal way to maintain records might include having “...an official photographer to record key events” (USFA-TR-133, 1999, p.38).

Texas A&M University was proactive in preplanning for emergencies. The

university participated in a table top exercise with inter-jurisdictional emergency response agencies prior to the incident. “The University EMS service had also conducted a MCI drill just two weeks prior to the incident” (USFA-TR-133, 1999, p.5). Although identifying the victims was difficult, the workers did have a rigid accountability system in place that helped identify some of the victims by indicating who was working in what area of the structure.

Disasters involving schools have overwhelmed most dispatch centers. The “...shootings in Jonesboro, AR generated 840 calls in the first 3 hours of the event...that’s a lot to handle with only 3 dispatchers working the board” (Larton, 2001, p.26).

Dispatchers become overwhelmed just as the responders do on the scene. After two shooting incidents in San Diego County, CA, one in Santee and the other El Cajon, dispatchers found that with many dispatchers working on the same computer aided dispatch (CAD) event, it was difficult to quickly access incident information; therefore, they put pertinent information on a large board for easy reference. “This made it easy to see where parents should rendezvous to pick up their children, and what locations would be used for the interviewing of witnesses and other involved parties” (Larton, p.26). They also determined a need for the dispatch center to communicate with local school officials and that the Public Information Officer (PIO) helped alleviate the strain on the overloaded non-emergency lines.

School officials in the El Cajon updated their emergency plans because of the incident 17 days earlier in San Diego. “Smith (2001) stated that the number of victims in the El Cajon incident were limited due to having law enforcement assigned full time to the school campus” (Drake, 2002, p. 8). During the incident they were able to lockdown

nearly all of their 2900 students; therefore, making it easier to evacuate and reconcile students with their families.

Seven different fire departments responded to the shooting incidents in San Diego County, CA. These departments work impeccably together as one team. Fehlberg (2001, p. 25) credits this to the fact that these departments do many things jointly including responding to the same incidents on a daily basis, developing procedures, and operating a training facility. They also have the same communication capabilities and practice the use of unified command. “Both the Santee and El Cajon Fire Departments reported that all of the most seriously injured patients, including everyone with gunshot wounds or shrapnel injuries, were packaged and en route to area hospitals in less than 35 minutes from the initial dispatch” (Fehlberg, p.28).

The shooting at Columbine High School taxed the responders and dispatchers immediately. The police and fire department were not able to communicate by radio because they were on different systems. The traffic had to be controlled so the wounded could be transported. A countless number of people other than first responders came to the scene. “Parents who had heard of the situation were arriving at the scene attempting to retrieve their children...” (Riemer, 1999, p.15). Accounting for all the students coming out of the school, was an immense task.

Managing all the responders on the scene was difficult. Accountability, unit integrity, and the safety of the responders were hampered by freelancing. A physician on the scene acting as the medical control officer “...on his own initiative, assembled a team of on-scene paramedics to search the school with him. Their personal safety, as well as that of all emergency responders, who were still on the scene was jeopardized by these

actions” (USFA-TR-128, 1999, p. 24).

Heightman (1999a p. 46) provides several lessons learned at the Columbine High School incident:

1. A unified command post must be established and positioned well out of harm’s way.
2. Early information received will be unclear and conflicting.
3. A staging officer and staging base need to be established early.
4. Triage and EMS staging areas should be located away from high-activity areas, such as the command post.
2. Position police officers in triage and treatment areas at violent scenes. Officers may need to be assigned to transporting ambulances.
3. All personnel in key positions at a complex scene must utilize incident command vests.
4. At incidents involving weapons, EMS and fire personnel directed to enter areas near the scene must understand it is impossible for law enforcement officials to guarantee the areas safe (clear) before they have all suspects in custody.
5. Cellular/telephone systems will overload.
6. Scene managers must prepare to request spare radio batteries, rehab supplies, vehicle refueling, auxiliary lightning, and utility company resources early in an incident.
7. Rescuers must be alert for explosive devices on victims.
8. Individuals evacuated from an involved facility can provide valuable

information prior to being moved to a relocation collection point.

9. Scene managers must be prepared to receive and deploy apparatus, personnel, and resources not specifically requested on scene.
10. A liaison from the command post needs to brief personnel in the staging areas about known or potential scene hazards.
11. Incident commanders should contact the Federal Aviation Administration (FAA) early to restrict news helicopters from interfering with aeromedical operations and creating unnecessary noise.
12. Personnel unfamiliar with incident management systems will present logistical and operational complications on scene (Smolsky, 2001, p. 13-14).

After the incident several lawsuits were filed by the families of the victims. The families claimed that the responders did not react quick enough to prevent some deaths although “the potential for collateral injury or death to emergency responders during the incident was substantial” (USFA-TR-128, 1999, p. 2). One of the suits came from a teacher’s daughter because authorities had been notified of his serious condition from a teacher hiding in the same room and they did not act. “They knew the room was accessible from the outside, they had the emergency resources to rescue him, and yet let him bleed to death” (Graham, 2000, p. 23).

Many of the responders and their families had a difficult time dealing with the tragedy. The families of some of the responders didn’t know the status of their family member until well after the incident. Critical incident stress debriefings (CISD) were performed on scene and for many days following the incident. Littleton Fire Department personnel were being relieved of duty early that evening although some protested because

they wanted to finish their shift. The “...Fire Chief, in retrospect, reported that before personnel are released from duty after a major incident, the department should make sure that the individuals will not be alone” (USFA-TR-128, 1999, p. 43). Personnel may seek the support of co-workers that can relate to their situation.

In Drake’s draft of an operational response plan for school violence for Orange County, CA. he wrote steps for both the school and the Fire service to follow.

The following are the steps **School Officials** will follow during incidents of violence:

1. Activate and Emergency Response – Call 911...
2. Intercom System – Announce school-wide lockdown status...
3. Lockdown instructions:...
4. Call District Office:...
5. Site Administrator provides Law Enforcement Officials with Crisis Response Bag...

**Fire Service Response Actions...**

1. Report on Conditions...
2. Assess Risk to Personnel and Public...
3. Establish a Unified Command...
4. Establish Safe Perimeter, Hot or Exclusion Zone...
5. Develop Joint Incident Action Plan (IAP)...
6. Identify Resource Needs...(Drake, 2002, p. 27-30).

A crises response bag contains items to assist the first responders such as maps, keys, and student roster. Drake (2002) also noted that police, fire department, and schools should

develop school plans together, practice them, and revise them regularly.

In a policy covering gun fire or violence, the Prospect Heights Fire Protection District fire fighters are not allowed to enter the scene until it is declared safe by law enforcement. Protective and uniform clothing are also laid out in this policy. “Members are directed to refrain from wearing uniform shirts or badges, and are required to wear helmets when operating in the field” (McElroy, 2000, p. 11). “Garry Briesse states that the position of the International Association of Fire Chiefs (IAFC) is that “No fire service personnel, nor their equipment, nor their uniforms, should be used in law enforcement functions that compromise the perceived neutrality of the fire service.” (Elliott, 1999, p. 49).

The following are some of the components of the St. Augustine, FL Fire department policy for response to hostile incident locations: do not use lights and sirens when entering immediate area of incident; stage until the scene is deemed safe by law enforcement, wear firefighter helmet; withdraw if hostile action takes place after firefighters have entered; and notify communications if in immediate life or death situation. The policy also covers coordination with law enforcement agencies. “A ‘unified command’ shall be established whenever a mass casualty or long duration hostile scene event occurs” (McElroy, 2000, p.33).

The Tolleson Arizona Fire Department has a preplan for every public school. Pre-Plan books for schools include exits/entrances, lay outs of buildings, aerial photographs, school evacuation plans, and contact telephone numbers for schools officials. “If a violent incident did happen at a school, the fire department would have very valuable data to share with police agencies at the unified command post” (Pickett,



2000, p. 6). The maps and photographs would bring the police up to speed on the layouts and would save them time securing the scene.

The New Jersey Fire department "...is required by state law to review and post evacuation plans for school buildings" (Lowden, 2002, p. 52). During preplanning fire departments can make suggestions regarding parking and traffic flow while visiting to the schools. Involve the police department in the preplanning and drills. Lowden (2002) believes sharing the responsibility will give all parties a sense of inclusion.

After the incident at Columbine High School, the Littleton Fire Department is focused on three broad recommendations.

1. Establish a very broad regional communications plan. Example, use ICS form 205 to preplan radio communicating frequencies and channels that will be used during major incident of this scale.
2. Establish a standardized emergency management system that can be used by fire, EMS, law enforcement and hospitals.
3. Be able to coordinate fire/EMS operations with police SWAT team

Operations (Nordberg, 1999, p 50).

Preplanning for school emergencies is essential. The following preplan considerations developed by Lynsky and Winder although generic could be useful to all agencies.

Area perimeters

Building Layouts

Staging Areas

Medical or tactical helicopter landing zones

Unified command post (interior and exterior)

Potential locations to disseminate information to parents

Reunification points for students and parents

Primary and secondary off-campus evacuation sights

Media collection areas that provide access while inhibiting interruptions of

Emergency operations (Lynsky, Winder, 2000) (Dolan, 2000, p. 13-14).

Schools can help the responders in many ways including preplanning for emergencies. Detwiler (2000, p. 1) believes that Community Emergency Response Teams (CERT) in high school is a great way to sustain interest and participation in school emergency planning. Many states have passed laws or are drafting legislation requiring school emergency management programs. Georgia "...law directs the Georgia Emergency Management Agency (GEMA) to provide training and technical assistance on issues of school safety to education, emergency management and public safety communities of Georgia" (Detwiler, p. 5). School officials as well as emergency responders are offered training programs. Technical assistance is given by conducting site surveys of schools and drills, and advising on school safety plans. Montana, Utah and Pennsylvania also have similar programs.

Every school in Washington State is required by the Office of the Superintendent of Public Instruction (OSPI) to have a crisis response plan in place by fall of 2003 (R. Town, personal communication, June 25, 2003). Washington schools have been instructed by the OSPI to practice their plans and to make sure they have worked together with local emergency management officials (Bergeson, 2003). (Orman, 2003, p. 6).

Student CERT programs are also being used in Okaloosa County Florida. The Federal

Emergency Management Agency (FEMA) outlines how CERT programs are administered. Hodgkinson (2000) feels that the students would be better equipped to handle events that would overwhelm other students. CERT students would be able to advise responder about the incident and the school lay out.

Park County School District's in central Colorado emergency plan was developed jointly by school staff, students, parents, fire, police, emergency medical responders, and civic leaders. The plan outlines the role for the emergency responders and the school staff. Familiarization training covers the following components:

- Recognition of Emergency Incident
- Recognition of potential threats
- When to call and how to call 911
- Incident Command System (ICS)
- Mass Casualty Incident (MCI)
- Basic first aid and CPR (Park County School district Emergency plan overview, 2003, p.3).

Park County's plan addresses relaying specific information to the responders such as number of people injured, type of incident, location, and pertinent information (shooter on scene and number of shooters, type of weapon, and vehicle description (Shooting/shots heard section, 2003, p. 2). They also use a color card notifications system during lockdowns to indicate the safety status of classrooms.

## **Interviews**

Interviews were conducted with Memphis City School system's security manager, Shelby County School system's project manager for crisis and emergency response, and

personnel that have responded to incidents involving violence and/or mass casualties at schools to supplement the literature review. The interviews can be found in Appendix A.

## **Questionnaire**

A questionnaire was distributed to determine the following: what common problems emergency responders face at school incidents involving violence and/or mass casualties and what fire departments have guidelines for responding to these types of incidents. The questionnaire was necessary because the MFD does not have any data on problems emergency responders face at school incidents involving violence and/or mass casualties and to obtain guidelines from other departments. The questionnaire can be found in Appendix B.

These findings influenced the project by determining what common problems emergency responders face at school incidents involving violence and/or mass casualties and what components the MFD should include in their SOPs for responding to incidents involving violence and/or mass casualties.

## **PROCEDURES**

### **Definition of Terms**

**Mass Casualty Incident: (MCI)** an incident which could overwhelm the day to day emergency medical response system.

**Incident Command System: (ICS)** “The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident” (NFA-ICS-SM, 1993, p. A-5).

**Command Post:** "...Location at which primary command functions are executed..." (NFA-ICS-SM, 1993, p. A-3).

**Unified Command:** "Unified command is shared responsibility for overall incident management as a result of a multijurisdictional or multiagency incident (NFA-ICS-SM, 1993, p. 1-7).

**Joint Action Plan:** An action plan developed by multiple agencies on the scene of an incident. An action plan is "the strategic goals, tactical objectives, and support requirements for the incident" (NFA-ICS-SM, 1993, p. A-5).

**Pre-incident planning:** Gathering and documenting information and on a facility prior to an incident to aid in the decision making process in the event of an emergency. Information may include a layout of the facility, hazardous materials, and contact numbers.

**Resources:** "All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained" (NFA-ICS-SM, 1993, p. A-6).

**Lockdown:** A procedure school systems use in the event of a violent incident. Students are locked inside the classrooms, the blinds are closed, and the student and staff sit on the floor away from windows and doors.

**Violent Incident:** an incident where there is a report of intentional harm such as a shooting, stabbing, assault, bombing, or other weapons are involved.

**Fire Management Zone: (FMZ)** A dedicated area in one's running territory specific to one's shift and company assignment where they are responsible for

performing prevention strategies (e.g., hanging smoke detectors, hydrant testing, public education and conducting surveys at target hazards).

### **Literature Review**

This paper was written to follow the format provided in the June 2001, Executive Fire Officer Program Operational Policies and Procedures Applied Research Guidelines. The author began gathering data in November of 2004. Journal articles were obtained from the National Fire Academy's Learning Resource Center. News paper articles were obtained from the Memphis and Shelby County Public Library. Technical reports were obtained through the USFA publications department. The Internet was used to obtain articles.

### **Interviews**

Interviews were conducted with the Memphis City School system's security manager Sam Mosess on April 21, 2005 and with the Shelby County School system's project manager for crisis and emergency response Patty Murphree on April 25, 2005. The purpose of these interviews was to determine what the local school systems do to assist the emergency responders that respond to incidents involving violence and/or mass casualties. An additional purpose was to determine what the fire department could do to help things run as smoothly as possible during these type incidents.

Interviews were conducted with personnel that have responded to incidents involving violence and/or mass casualties. Lieutenant Ronald Anthony of the MFD was interviewed on April 19, 2005, Director Chuck Latimer on April 27<sup>th</sup>, 2005, and Deputy Chief Rob Martin on April 28<sup>th</sup>, 2005. The purpose for the interviews was to ascertain what problems they had on the scene; if their departments had SOPs pertaining to these

types of incidents prior to the incident, and if their departments developed or changed their SOPs after the incident.

### **Questionnaire**

A questionnaire was developed to determine what common problems emergency responders face at school incidents involving violence and/or mass casualties. An additional reason for the questionnaire was to reveal which fire departments have guidelines for responding to these types of incidents that could be sent to the author. The questionnaire consists of three close-ended questions and one open-ended question.

### **Process**

The questionnaire was developed by the author on February 4<sup>th</sup>, 2005 and distributed to the Executive Analysis of Fire Service Operations in Emergency Management and the Executive Development classes held at the National Fire Academy (NFA) from February 28<sup>th</sup>, 2005 – March 11<sup>th</sup>, 2005. The questionnaire was also sent to fire departments in Shelby County and within the surrounding area of the county. The completed questionnaires were returned to the author at the NFA, through the United State Postal Service, fax, and by e-mail. The results of the questionnaire were then manually tabulated.

### **Population Questionnaire**

Fifty four questionnaires were given out to the classes that attend the NFA February 28 – March 11<sup>th</sup>, 2005 and six were sent out to neighboring departments. A total of 48 questionnaires were returned to the author by May 5<sup>th</sup>, 2004. A list of fire departments that returned the questionnaire can be found in Appendix C

## **Limitations**

There were several limitations to the questionnaire including getting the questionnaire to classes that attended the NFA on different dates. The amount of time it took to receive the questionnaires was lengthy. Compiling the data for the questionnaire was time consuming, particularly the open-ended questions. The inexperience of the author in developing questionnaires and conducting interviews was also a limitation.

The author's procedures may be duplicated in other departments by using the population of future NFA classes, local education administrators and emergency responders that have responded to MCI or violent incidents at schools. Utilization of a local library may also be necessary.

## **RESULTS**

### **Interview results school systems**

Interviews were conducted with representatives from the Memphis City School system and the Shelby County School System to determine what the school systems do to assist the emergency responders that respond to incidents involving violence and/or mass casualties and to determine what the fire department could do to help things run as smoothly as possible during these type incidents. Both school systems will send a representative from the school system to the command post to assist and give details about the incident to the Incident Commander (IC). The County school system has at least five people at each school that have had ICS training and CERT training. The representatives will bring layouts of the school to the command post. The Shelby County School system has also provided the first responders in Shelby County Compact Disc with maps of all the schools.



The schools account for the uninjured as well as the injured students through the incident. If a student is transported to a hospital or relocated, they document the students name as well as where they were taken. They also have evacuation plans and relocation sites in place. They handle the reuniting of the students to the parents. In the event of a major disaster both school system have an enough food to stand alone for three days.

Prior to the arrival of first responders each school system has personnel trained in CPR and first aid to help the injured. They also have lockdown procedures in place that include color coded cards to indicated if the classroom is safe or not and if they have any injuries. After the arrival of the first responders they will assist in locating anyone that is not accounted for if needed and only if it is safe.

The Memphis City School system shares the responsibility of informing the media with the fire department. The Shelby County School system has public information officers at each school that assist their media director. They also set up a staging area for the media.

When asked what the fire department could do to help, both school systems wanted to do more training with the first responders. The Memphis City School would also like the fire companies to tour the schools so they would become familiar with staff and the schools layouts.

### **Interview results first responders**

Interviews conducted with personnel that have responded to incidents involving violence and/or mass casualties to determine what problems they had on the scene, if their departments had SOPs pertaining to these types of incidents prior to the incident, and if their departments developed or change their SOPs after the incident. In the

Chimney Rock incident the dispatch center did not send a command officer, the responders did not know how many children were injured because some had been taken out of the area and handling the parents was difficult. The only problem at the Dyersburg State Community College incident was they had a hard time getting emergency units on the scene that could transport to a trauma center further away. The Pearl High School incident had several problems. The information from their dispatch center was wrong therefore, responders entered the building before it was secure. They did not know what other agencies on the scene were doing. They did not know how many people were injured. They could not account for all the students. The parents embarked on the school causing traffic problems and the phone lines were overwhelmed.

Prior to the incidents none of the departments had SOPs for responding to these types of incidents. The MFD still does not have a SOP, Dyer County is working on one and the Pearl Fire Department has a basic plan in place.

### **Questionnaire results**

To reveal what common problems emergency responders face at school incidents involving violence and/or mass casualties a questionnaire was developed. Additional reasons for the questionnaire was to determine what departments have SOPs for these type incidents and how many have responded to an incident of this nature. Forty eight of 60 questionnaires were returned.

Fifty percent (24 of 48) of the fire departments had responded to a violent incident at a school. Sixteen percent (8 of 48) of the fire departments had responded to a MCI at a school. Thirty five percent (17 of 48) of the fire departments have guidelines for responding to incidents involving violence or mass causality incidents at schools. The

following table illustrates the common problems the fire departments listed and how many listed each problem when ask what are common problems your emergency responder face at these types of incidents.

<b>Problems</b>	<b>Number of responses</b>
Communications	13
Interaction with schools	9
Unified command	8
Parents	7
Obtaining accurate information	7
School accountability	4
Tracking the injured	4
Resources	3
Personnel safety	3
Security	2
Staging	2
Crime scene issues	1
Crowd control	1
Media Impact	1
Responder accountability	1

**Research Question 1.** What common problems do emergency responders face at school incidents involving violence and/or mass casualties? The literature revealed that communications would be a problem, not only will the communications system be

overloaded so will the telecommunication systems. Communications between the responding agencies and the school systems may be hampered because of the differences in their radio, not setting up a unified command, and because of unclear and conflicting information being received. Acquiring and maintaining enough resources on the scene may be difficult. Managing and setting up rehab for all the resources on the scene will also be complicated. Freelancing may be an issue. Rumor control because of all the responders may also be problematic. Other problems include controlling the parents and on lookers on the scene, accounting for the students and the responders, identifying victims, and controlling the traffic.

There are also problems after the incident. The tragedy will affect the responders and their families emotionally. Lawsuits have also been filed because of perceived inaction or not quick enough action by responders.

The first responders interviewed also indicated that they did not initially have enough resources on the scene. Other problems included communications, traffic, parents and knowing the number of injuries. The Pearl Fire Department never set up a unified command, causing confusion between the police department and them. The results of the questionnaire also indicated the above as being problems as well as tracking injured patients and crime scene issues.

**Research Question 2.** What guidelines and/or recommendations are other emergency responders using or suggest using when dealing with violence and/or mass casualty incidents at schools? The following are guidelines or recommendations from the literature review:

Use ICS and unified command.

Develop a joint incident action plan set up a command post.

Use command vest. Set up staging area early in the incident.

Set up a triage and treatment area away from busy areas.

Document as much as possible.

Set up landing zones.

Preplan for emergency through drills and prepare layouts of all schools.

Order incident resources early (equipment, personnel, and supplies).

Responders must be alert for secondary devices.

Advise personnel in staging area of known or potential hazards.

Clear air space through FAA. Assess risk to personnel and public.

Do not allow fire fighters to enter area until law enforcement declares it's safe.

Wear fire fighting helmets when operating in the field.

Do not wear uniform shirts or badges (fire fighters could be misidentified as police officers by suspect).

Do not use lights or sirens when entering immediate area of incident.

After entering the scene withdraw if hostile action takes place.

Notify communications if in immediate danger.

Identify location to disseminate information to parents.

Set up a secondary evacuation sights for the school and reunification area for students and parents.

**Research Question 3.** What are school systems doing to assist the emergency responders that respond to school incidents involving violence and/or mass casualties?  
The local school systems account for the students, assist in the command post, provide

responders with layouts of the school, have evacuation plans and relocation sites in place, reunite students with parents, can provide basic first aid to the students prior to emergency responders arrival, and have lockdown procedures in place.

The literature review revealed that schools across the country are doing the following to assist the emergency responders: train staff to use ICS, have crisis response plans, and practice them. Many of the crisis plans address giving specific information (shooter on the scene, number of injured, type of injuries) that would be helpful to the responders during an incident. Train staff and some high school students to become CERT teams. They have lockdown procedures in place that use color coded cards to indicate the status of the classroom.

**Research Question 4.** What components should the Memphis Fire Department include in their SOPs for responding to incidents involving violence and/or mass casualties at schools? The following components revealed by the research should be included in the MFD's SOP: preplanning, safety, unified command, staging, media control, medical branch, and resources. The literature review also revealed a need for a location to disseminate information to parents, reunification points for students and parents, and primary and secondary evacuation locations. However, after interviewing representative from both the local school systems, it was determined that they would handle the above components. A copy of the SOP for responding to incidents involving violence and/or mass casualties at schools developed by the author can be found in Appendix D.

## **DISCUSSION**

The literature review and the author's findings through the questionnaire and

interviews are comparable. Common problems emergency responders face at school incidents involving violence and/or mass casualties include communications, acquiring, maintaining, and managing resources, rehab, and freelancing. The MFD has 31 emergency units to cover the city. Although this would appear to be sufficient, the author has often been told that there are not any available when calling for additional equipment. Accounting for fire fighters and maintaining crew integrity on a routine fire can at times be demanding. Accounting for responders, students, and identifying victims on a chaotic scene such as a school shooting will be complicated. (USFA-TR-133) noted that the severe trauma suffered by the deceased made immediate recognition impossible (1999, p.21). Additional problems include controlling parents, on-lookers, and traffic. Many of the responders may have a hard time dealing with the event emotionally. “The age of the deceased and the strong emotions and traditions surrounding the incident had a significant impact on the emergency responders” (USFA-TR-133, 1999, p.25). Incidents involving children are hard for most responders. The MFD has conducted several CISD for auto accidents involving multiple children.

Guidelines, recommendations, and helpful hints other emergency responders are using or suggest using when dealing with incidents involving violence and/or mass casualties include using ICS, developing joint incident action plans, informing dispatch if a responder is in immediate danger, and assess risk to personnel and public.

Heightman (1999a p. 46) provides several lessons learned at the Columbine High School incident:

1. A unified command post must be established and positioned well out of harm’s way.

2. Early information received will be unclear and conflicting.
3. A staging officer and staging base need to be established early.
4. Triage and EMS staging areas should be located away from high-activity areas, such as the command post.
5. Position police officers in triage and treatment areas at violent scenes. Officers may need to be assigned to transporting ambulances.
2. All personnel in key positions at a complex scene must utilize incident command vests.
3. At incidents involving weapons, EMS and fire personnel directed to enter areas near the scene must understand it is impossible for law enforcement officials to guarantee the areas safe (clear) before they have all suspects in custody.
4. Cellular/telephone systems will overload.
5. Scene managers must prepare to request spare radio batteries, rehab supplies, vehicle refueling, auxiliary lightning, and utility company resources early in an incident.
6. Rescuers must be alert for explosive devices on victims.
7. Individuals evacuated from an involved facility can provide valuable information prior to being moved to a relocation collection point.
8. Scene managers must be prepare to receive and deploy apparatus, personnel, and resources not specifically requested on scene.
9. A liaison from the command post needs to brief personnel in the staging areas about known or potential scene hazards.



10. Incident commanders should contact the Federal Aviation Administration

(FAA) early to restrict news helicopters from interfering with aeromedical operations and creating unnecessary noise.

11. Personnel unfamiliar with incident management systems will present

logistical and operational complications on scene (Smolsky, 2001, p. 13-14).

The MFD has SOPs on MCIs, and violent incidents although they are not specific to schools. A “Signal C” is used by the MFD if a member encounters a violent situation; this notifies dispatch to send help. Using these SOPs, unified command and preplanning in conjunction with the SOP developed by the author found in appendix D for school emergencies alone should eliminate some of the confusion if an incident should occur.

School systems across the country have developed and implemented all hazard emergency action plans. One of the plans outlines the role for the emergency responders and the school staff. Familiarization training covers the following components:

- Recognition of Emergency Incident
- Recognition of potential threats
- When to call and how to call 911
- Incident Command System (ICS)
- Mass Casualty Incident (MCI)
- Basic first aid and CPR (Park County School district Emergency plan overview, 2003, p.3).

The local school systems have similar training and emergency plans. They also assist in the command post, account for students, have layouts of the schools available, reunite students with parents, and have relocation sites in place. At the Chimney Rock

Elementary School incident the school staff accounted for all the uninjured students and assisted the responders by giving them the names of the injured students. Having a member of the school staff that is trained in ICS in the command post will be a tremendous asset in the event of an MCI or violent incident at a school.

Components the MFD should include in their SOP for responding to incidents involving violence and/or mass casualties are preplanning, safety, staging, media control, and setting up a medical branch. The following steps drafted by Drake that the fire service should follow during an incident of violence should also be included.

1. Report on Conditions...
2. Assess Risk to Personnel and Public...
3. Establish a Unified Command...
4. Establish Safe Perimeter, Hot or Exclusion Zone...
5. Develop Joint Incident Action Plan (IAP)...
6. Identify Resource Needs...(Drake, 2002, p. 27-30).

It is the author's belief that implementing a SOP for responding to a MCI and/or a violent incident at a school that includes preplanning and testing SOP through drills with the schools system should reduce the confusion at this type of incident; therefore, possibly saving both firefighter and civilians' lives.

## **RECOMMENDATIONS**

The literature, questionnaires, and interviews reveal that responders face many problems at school incidents involving mass casualties and or violence. This causes uncertainty and conflict for the responders, school faculty, and parents. Implementing guidelines that address preplanning and responding to incidents at schools will ensure the

safety of the responders and provide timely medical assistance to the victims.

It is recommended that the MFD fine-tune the SOP developed by the author through brainstorming, table top exercises, and drills with the schools, law enforcement, and other agencies before implementing it. Conducting drills will improve communications and build relationships with all involved. The SOP should also be reviewed and revised as necessary to include any changes or improvements in technology and response strategies. The SOP may need to be update as the trends in incidents at schools change. Finally the MFD should develop an SOP for dispatchers to follow for these types of incidents at schools.

## REFERENCES

- Detwiler, S. (2000, December). School Emergencies: Are We Prepared?. *International association of emergency managers Bulletin*, 17 (12), 1, 4-6.
- Dolan, M. (2000). *The Impact of Columbine and School Violence on Emergency Management*. Executive Fire Officer Research Paper, Emmitsburg, MD: National Fire Academy.
- Drake, A. D. (2002). *An Operational Response Plan For School Violence In Orange County, California*. Executive Fire Officer Research Paper, Emmitsburg, MD: National Fire Academy.
- Edmondson, A. (2004, December 9). 11 students arrested fighting at Cordova. The Commercial Appeal. Retrieved January 15, 2004, from <http://www.commercialappel.com/mca/local>.
- Elliott, T. (1999, August). Firefight. *Fire Chief*, 43, p 44, 46, 48-50.
- Fehlberg, J. (2001 May/June). Under Fire, EMS Response to School Shootings. *911 magazine*, 24-25, 27-28.
- Graham, S. (2000 summer). Columbine High School, Hard Lessons for First Responders. *Every Second Counts the emergency response magazine*. p.22-26.
- Hodgkinson, J. (2000 September). A New Concept for High Schools. *International association of emergency managers Bulletin*, 17 (9), 6.
- Kumar, R. (2005, April 3). Seeking Safe Schools. The Commercial Appeal, pp. B1, B4.
- Larton, D. (2001, May/June). Police Communications, Handling an In-Progress School Shooting. *911 Magazine*, 26.
- Lawden, T. (2002, May). Violence on the Syllabus. *Fire Chief*, 52-58.
- McElroy, F. (2000). *Firefighters' Role at School or Workplace Violence Incidents* Executive Fire Officer Research Paper, Emmitsburg, MD: National Fire Academy.
- National Fire Academy. (1993). *The Incident Command System Student Manual* Emmitsburg, MD: Author.
- National Fire Academy. (2001). *Executive Analysis of Fire Service Operations in Emergency Management Student Manual* (1<sup>st</sup> ed.). (FEMA/USFA/NFA-ED-SM). Emmitsburg, MD: Author.
- National Fire Academy. (2002). *Executive fire officer program applied research*

- guidelines*. Emmitsburg, MD: Author.
- Nordberg, M. (1999 October). When Kids Kill, Columbine High School Shooting. *Emergency Medical Services, The journal of Emergency Care, Rescue and Transportations*, 28 (10) 39-50.
- Orman, C. W. (2003). *An Evaluation of school Disaster Planning Processes in Yakima County, Washington*. Executive Fire Officer Research Paper, Emmitsburg, MD: National Fire Academy.
- Park County School District. (2003). *Park County School District Emergencies Procedures Plan*. Retrieved April 11, 2005, from <http://www.parkcountyschools.org/Admin/EmergPlan/Overview.aspx>.
- Pickett, G. (2000, July). Planning for Sudden Hazardous Events: Tactical Considerations for Mass Casualty Incidents, School Shootings. *International association of emergency managers Bulletin*, 17 (7), 6.
- Riemar, T. (1999), *Emergency Response to schools*. Executive Fire Officer Research Paper, Emmitsburg, MD: National Fire Academy.
- Smolsky, M. (2001). *School Violence: Ready or Not*. Executive Fire Officer Research Paper, Emmitsburg, MD: National Fire Academy.
- United States Fire Administration/Technical Report Series-128 (1999, April). *Wanton Violence at Columbine High School*. Emmitsburg, MD: Author.
- United States Fire Administration/Technical Report Series-133 (1999, November). *Bonfire Collapse Texas A&M University College Station, Texas*. Emmitsburg, MD: Author.

## **Appendix A**

### **Interview with Memphis City School security manager**

**Name:** Sam Mosess

**Date:** 4-21-05

**1. Does the school system have a multi hazard safety plan?** Yes, we have 191 plans.

Each school has their own plan.

**2. The schools all have different plans?** Yes specific for that school. There is an

overall plan that all the schools follow.

**3. How will we communicate with the school staff?** In person.

**4. Will a representative go to the command post?** Yes

**5. Does the school staff notify the administrative office?** The principal will notify our dispatch office.

**6. Will a liaison from the administrative office come to the command post?** Yes

**7. Does the school system handle reuniting children with parents?** Yes, we notify the parents and have a check out form for them to fill out when they pick their child up.

**8. How does the school account for the students?** Every teacher stays with their class and when they are in a safe location, they do a roll call then radio or send the results to a representative in the command post. If the children are moved off site, then a second roll call is done before the bus leaves the school. Before a child is transported to a hospital, information on that child is taken like their name and the class they are in.

**9. What if teacher is injured?** A staff member will perform a roll call from a master roll of that class that include students that are absent on it.

**10. What if it's an after school event?** We attempted to get information from people on the scene about who was there. If it's some type of game, we can get an idea of how many people are there from the ticket numbers and team rosters. We always have an administrator and staff on site that can account for the officials and coaches. We also have police on the scene that can help.

**11. Does each school have layout of the school with maps and utility shutoffs that can be brought to the command post immediately?** Yes, in the office and they are updated anytime a change is made.

**12. Do you have lock boxes on the outside of the school with the layouts and contact numbers in them?** No

**13. Do you think it would be advantageous for the first in fire companies to have maps of their school in the apparatus?** Yes, and we can set that up.

**14. Does each school have staff that can administer first aid/CPR?** Yes and we have nurses at the schools.

**15. Does the staff search for unaccounted students?** We will help search for students if it is safe.

**16. Do the students have I. D. cards?** 12 to 14 schools do. Each principal does the budget for their school and choose to budget for them or not.

**17. Do you have lockdown procedures?** Yes

**18. Does the school system have procedures for evacuations and relocations?** Yes, we have identified buildings and churches in the area of the school we can use and we also use buildings at the fairgrounds.

**19. After a school has been evacuated how does the school system handle the physical need of the students? (Food, restrooms, weather issues)** Yes we contracted with Laidlaw to help us with transportation. Each school has enough food to stand alone for three days.

**20. Does the school have post incident counseling procedures?** Yes

**21. What can the Fire Department do to help things run smoothly as possible on an incident with mass casualties, a violent incident, or where an evacuation is necessary (hazardous material incident)?** We would like to do walk through with the fire department more often and do more drilling.

**22. Does the school system have any concerns with how the Memphis Fire Department has handled these types of incidents?** No, other than we can't predetermine how the companies set up because that depends on the event.

**22. How does the school system handle the media?** That's a shared responsibility with the fire department.

**23. Would the school system prefer the Memphis Fire Department hold information about the number of injuries and or deaths until notification of the families are made?** Yes



## **Interview with Shelby County School system's Project Manager for Crisis and Emergency Response**

**Name:** Patty Murphree

**Date:** 4-25-05

- 1. Does the school system have a multi hazard safety plan?** Yes
- 2. Are all schools the same?** We are trying to get them all on the same page.
- 3. How will we communicate with the school staff?** Face to face. We have a minimum of 5 people at each school that are trained in ICS and have CERT training.
- 4. Will a representative go to the command post?** Yes
- 5. Does the school staff notify the administrative office?** The principal will notify us.
- 6. Will a liaison from the administrative office come to the command post?** Yes and we will assign a District incident commander for the event.
- 7. Does the school system handle reuniting children with parents?** Yes, we have the parents assemble in one area have them fill out the paper work then we call for the child to be released to reunite with the parent.
- 8. How does the school account for the students?** The teacher is required to carry their class roll with them at all times and we also have a teacher buddy class roll in the event that something happens to a teacher. We also have a master copy in the office and a list of absent children for that class.
- 9. What if it's an after school event?** That is difficult because there are no sign ins, no way to account for everyone. We are presently working on that. We always have an administrator from the school on site when an event is going on.
- 10. Does each school have layout of the school with maps and utility shutoffs that can be brought to the command post immediately?** Yes and the principal carries a bag

that contains contact numbers and five maps to be taken to the command post. We also provided the first responders in Shelby County with CDs with maps of all the schools.

**11. Does each school have staff that can administer first aid/CPR?** Yes

**12. Does the staff search for unaccounted students?** If it is safe.

**13. Do the students have I. D. cards?** No because of budget constraints, but we would love to.

**14. Do you have lockdown procedures?** Yes

**15. Does the school system have procedures for evacuations and relocations?** Yes, we will bus them to another school.

**16. After a school has been evacuated how does the school system handle the physical needs of the students? (Food, restrooms, weather issues)** Each school has a three day supply of food and we can have it brought in by private vendors.

**17. Does the school have post incident counseling procedures?** Yes we have school counselors and are training staff in crisis management.

**18. What can the Fire Department do to help things run smoothly as possible on an incident with mass casualties, a violent incident, or where and evacuation is necessary (hazardous material incident)?** Train with us.

**19. Does the school system have any concerns with how the Fire Department has handled these types of incidents?** Yes, because we have five different departments that respond to our schools communication is difficult and arguments arise about who is in command. At the Chimney Rock incident there was confusion over who was in charge.

**20. How does the school system handle the media?** We have a Public Information Officer at each school that assist our media director and we set up an area for the media.

**21. Would the school system prefer the Memphis Fire Department hold information about the number of injuries and or deaths until notification of the families are**

**made?** Yes, we try to have a joint information center to discuss what is to be released to the media.

**22. Do you have anything to add?** Yes, we currently have ten people that can instruct CPR and hope to add more. We also hope to train jointly with the first responders.

## **Chimney Rock Elementary Interview**

**Name:** LT. Ronald Anthony

**Date:** 4-19-05

**Background:** A car jumped the curb at Chimney Rock Elementary hitting nine children and one adult. LT. Anthony was the first company officer on the scene; he assumed command and maintained it through much of the incident.

- 1. How were communications with the Police, FIRE, EMS, School, Mutual aid companies?** Communications were good; the Sheriff department was on the scene when we arrived and gave us a good disposition. The principal did an excellent job anytime I asked for something she took care of it.
- 2. Did you have enough resources on the scene?** Not at first, but when I called for more emergency units and two Wings to air lift students I got them pretty quick.
- 3. Was Unity of command or free lancing an issue?** Not really, there was so much to be done that nobody had time to free lance.
- 4. Was span of control an issue?** Yes and no. At first it was, then a unit supervisor got on the scene and set up a medical branch.
- 5. Was accountability of responders and issue?** No
- 6. How was accountability of the students handled?** The school staff accounted for the uninjured students and told us the injured student's names. We took the name of each student, where they were being transported, and what time they were transported.
- 7. Was a unified command set up?** No, we took care of the injured and the police blocked traffic and set up one of the landing zones.

- 8. What type of problems did the emergency responders encounter?** We didn't get a correct number of injured because some of them had been taken away from the area. The parents were a problem until the police could keep them away. Our Dispatch center never sent a Battalion Chief or a Division Chief to the scene; they had to put themselves on the call.
- 9. Were ISDB done or requested after the incident?** Yes
- 10. Prior to the incident did you have SOP's that covered this type of incident?**  
No, just mass casualty incidents.
- 11. Does your department have SOP's now?** No
- 12. What would you do differently today?** I will make sure a Battalion Chief is dispatched to the scene sooner and get the police to hold the parents at bay right away.

## Dyersburg State Community College Interview

**Name:** Chuck Latimer, Director Dyer County Ambulance Service

**Date:** 4-27-05

**Background:** Director Latimer responded to the scene on September 17<sup>th</sup>, 2003 when Harold Kilpatrick Jr. took a group of students' hostage at Dyersburg State Community College. Five students were injured two critically when Kilpatrick began to fire rounds in the room. The police had to enter the room and had to kill Kilpatrick.

1. **How were communications with the Police, FIRE, EMS, School, Mutual aid companies?** Communications were good; we did have a little trouble communicating with the county emergency units.
2. **Did you have enough resources on the scene?** Yes
3. **Was Unity of command an issue?** Yes, we duplicated some actions.
4. **Was span of control a problem?** No
5. **Was accountability of responders an issue?** No
6. **How was accountability of the students handled?** The school handled that and was able to tell us who was in the classroom. Kilpatrick initially took 15 hostages and released four of them.
7. **Was a unified command set up?** Yes, and it went very good.
8. **What type of problems did the emergency responders encounter?** Not many, by the time we got on the scene the police had the scene secure and the traffic block. The only problem we had was getting emergency units on the scene that could transport to the bigger hospitals.
9. **Were ISDB done or requested after the incident?** No, we talked about it but did not feel it was necessary.
10. **Prior to the incident did you have SOPs that covered this type of incident?**  
No, we had SOP on MCI s and mutual aid agreements.
11. **Do you have SOP's now or did you make any changes?** We are still working on developing them.
12. **What would you do differently today?** I would have contacted county emergency units sooner.

## **Pearl, MS. High School Interview**

**Name:** Rob Martin, Deputy Chief Pearl Fire Department

**Date:** 4-28-05

**Background:** On October 1, 1997 Luke Woodham killed his mother then drove to school where he kill two students and wounded seven others.

- 1. How were communications with the Police, FIRE, EMS, School, Mutual aid companies?** Terrible, we didn't know what other agencies were doing. The dispatch information was also bad. We thought we were responding to an accidental shooting of only one person.
- 2. Did you have enough resources on the scene?** No, not at first.
- 3. Was Unity of command an issue?** Yes, the police did not want to conform to our ICS structure.
- 4. Was span of control an issue?** Not with the fire forces, but it was with the police.
- 5. Was accountability of responders and issue?** No
- 6. How was accountability of the students handled?** We got a roster from the school but we could not get an accurate head count. We found students hiding all over the school and some in the woods.
- 7. Was a unified command set up?** No
- 8. What type of problems did the emergency responders encounter?** We went in the school blind, not knowing if there were more shooters or not. We didn't know how many people were shot because so many of them were in shock lying on the ground. The parents embarked on the school and that caused traffic problems for the emergency units that were coming and going. Phone lines were jammed.
- 9. Were ISDB done or requested after the incident?** Yes, some of our responders had children that attended the school.
- 10. Prior to the incident did you have SOP's that covered this type of incident?**  
No

- 11. Do you have SOP's now or did you make any changes?** Yes, we have the police set up a command post. We respond to the command post and standby until the scene is secure.
- 12. What would you do differently today?** We would not enter the school until the police secured the scene. Set up a unified command. Ensure that emergency responder's children were accounted for. Establish staging area for incoming equipment and an area for parents to be reunited with their children.



## Appendix B

### Questionnaire

Name of department: \_\_\_\_\_

1. Has your department responded to violent incidents at a school?

\_\_\_\_\_

2. Has your department responded to a mass casualty incident at a school?

\_\_\_\_\_

3. Does your department have guidelines for responding to incidents involving violence or mass casualty incidents at schools?

\_\_\_\_\_

4. What are common problems your emergency responder face at these types of incidents? (e.g. communications, accountability)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If your department has a guideline to deal with incidents of this nature will you please forward it to me?

Hope Lloyd  
Memphis Fire Department  
8396 Trondheim Drive  
Cordova, TN 38018

E-mail **Hope.Lloyd@memphistn.gov**

Optional information: Name \_\_\_\_\_

Phone # \_\_\_\_\_

E-mail \_\_\_\_\_

## **Appendix C**

### **Fire departments that returned Questionnaire**

Asheville	Westminster, Colorado
Baltimore County	Wheaton, IL
Bartlete, TN	Wilson, North Carolina
Beachgrove, IN	Worthington
Bellingham, WA	Yuma
Bowling Green, KY	
Brecksville	
Bryan, TX	
Burlington, MA	
City of Seminole	
Colorado Springs	
Colton, CA	
Coon Rapids, MN	
Deerfield Twp.	
Eague River	
Eureka	
East Valley Yakima, WA	
Grand Chute	
Highland Villiage, TX	
Honolulu Fire	
Huber Heights	
Janes City County	
Kansas City, KS	
Lenexa, KS	
Lincoln, Nebraska	
Little Rock, AR	
Manion County	
Monroe, Michigan	
New York City	
Oklahoma City	
Philadelphia	
Poodre Fire Authority	
Providence, RI	
Richmond Ht., OH	
Rochester, NY	
Salt Riar	
San Bernardino, CA	
Shelby County, TN	
Stuart	
Tampa, FL	
Utica, NY	
Virgina Beach	
West Memphis, AR	

## Appendix D

### DIVISION OF FIRE SERVICES EMERGENCY OPERATION PLANS

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#### RESPONDING TO VIOLENT AND/OR MASS CASUALTY INCIDENTS AT SCHOOLS

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- Purpose:** To establish guidelines that address pre-incident planning, responsibility, functions, and operations at a violent and/or mass casualty incident that occurs at a school.
- Definition:** Violent incident is defined as an incident where there is a report of intentional harm such as a shooting, stabbing, assault, bombing, or other weapons are involved.
- Mass Casualty incident an incident which could overwhelm the day to day emergency medical response system.
- Unsecured area is defined as an area where there is reason to believe that weapons and/or violence may be present.
- Secured area is defined as an area which police have investigated and have found to be safe for operations.
- Scope:** This plan applies to all fire services personnel. The plan will be used in conjunction with the mass casualty plan and will include coordination with the police and school system.

#### **A. Responding:**

1. Warning devices such as (lights and/or sirens) should not be used in the vicinity of a violent incident. When police give notification that the scene has been secured, companies will respond using warning devices. Warning devices will be used on nonviolent incidents.
2. Consider using alternative response routes to prevent establishing a response route that can be predicted.
3. The first arriving company will stage out of sight of violent incident. Staging for nonviolent incidents will be determined by first arriving officer. Staging should not hinder the ingress and/or egress of police. Companies will not drive through unsecured area to reach staging.
4. The first arriving company will notify fire dispatch of staging location. The driver will be the staging manager unless relieved by a command officer. All additional equipment will respond to staging. Emergency Units shall stage adjacent to fire equipment.

**DIVISION OF FIRE SERVICES  
EMERGENCY OPERATION PLANS**

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School MCI and Violence  
Plan Continued

**B. Incident Commander**

1. The first arriving officer on the scene shall assume command and establish a command post (CP) until relieved by a command officer. The incident commander (IC) shall size up the incident and give a thorough description to fire dispatch. Should the officer deem this a MCI they shall activate MCI plan. (See mass casualty plan volume 3 page 2-109)
2. The first arriving command officer will assume command and establish a unified command structure with the police and the school system. A representative from the police and school system should remain in the command post for the duration of the incident. Communication should be face to face. In the event that a representative is not at CP the IC should request one.

**C. Operations**

1. Fire department personnel will not enter the scene until the immediate threat of violence has been eliminated.
2. An incident perimeter should be established declaring secured and unsecured areas.
3. A rescue branch and medical branch shall be established.
4. After arriving at staging companies shall gather backboards and C-collars for rescue operations.
5. Rescue teams will be a minimum of two fire fighters and will not enter a unsecured area without a police escort.
6. In an unsecured area rescue team responsibility is to remove injured to triage area. Rescue teams will not treat injured in an unsecured area.
7. Casualties will not be removed or triaged within the unsecured and/or crime scene area.

**DIVISION OF FIRE SERVICES  
EMERGENCY OPERATION PLANS**

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School MCI and Violence  
Plan Continued

8. Fire department personnel operating in an unsecured area will wear fire fighting helmet and fire department t-shirt so not to be misidentified as a police officer.
9. Personnel that encounter a violent situation should immediately withdraw to a safe location and notify operations of situation.
10. Personnel shall be aware of secondary device and plan an emergency evacuation route.

**D. Preplans**

1. Fire Companies shall perform site surveys for all schools within their Fire Management Zones (FMZ) yearly. Site surveys shall include but are not limited to school layouts, contact information, predetermined set ups for staging areas and ingress and egress routes.
2. Site surveys shall be kept in all first alarm companies FMZ manuals in cab of apparatus.
3. Drills will be conducted with police and schools officials yearly to evaluate the efficiency of emergency operation plan.